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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR   | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/542,152   | 07/13/2005  | Kenichi Sakuma         | IWI-16110           | 9823             |
| 7609 7590 04/03/2008<br>RANKIN, HILL & CLARK LLP<br>925 EUCLID AVENUE, SUITE 700<br>CLEVELAND, OH 44115-1405 |             |                        |                     |                  |
| EXAMINER<br>DICUS, TAMRA   |             |                        |                     |                  |
| ART UNIT<br>1794   |             | PAPER NUMBER           |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/542,152

**Applicant(s)**

SAKUMA ET AL.

**Examiner**

TAMRA L. DICUS

**Art Unit**

1794

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-893)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date 10/17/05

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election with traverse of claims 1-7 and 9 in the reply filed on 02/11/08 is acknowledged. The traversal is on the ground(s) that the special technical feature common to claims 1 and 8 is not disclosed by Kimura. This is not found persuasive because the instant claim 1 discloses the same technical feature including the same materials as disclosed by Kimura and all effects therefrom are inherent. Thus because the elected claims teach the same transparent and reflection-reduction layer materials and structure (described in the instant specification as a pearl pigment wherein the composition comprises titanium dioxide coated mica, see [0052]) the inventions lack unity as there is no contribution over the prior art. Applicant has already elected one invention as indicated in the reply received 2/11/08 and the Examiner has explained why the inventions lack unity as the special technical feature is disclosed by the applied prior art. Lack of unity of invention may be directly evident before considering the claims in relation to any prior art, or after taking the prior art into consideration, as where a document discovered during the search (see additional art used below) to shows the invention claimed in a generic or linking claim lacks novelty or is clearly obvious, leaving two or more claims joined thereby without a common inventive concept. It has been established that the special technical feature is known and there is lack of unity, since the special technical feature, be it a single feature or a group of

features, is not a technical feature that defines a contribution over the prior art. See MPEP 1806. Because this application contains the aforesaid inventions or groups of inventions which *are not* so linked as to form a *single* general inventive concept nor provide a contribution over the prior art (an information code observation method is different than a laminated member and the prior art teaches the inventive concept, so it is not making a contribution over the prior art) under PCT Rule 13.1; in accordance with 37 CFR 1.499, applicant is required to elect a *single invention* to which the claims *must be restricted*. The restriction requirement under 35 U.S.C. 121 and 372 is still deemed proper and is therefore made **FINAL**.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-7 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 refers to a side where the information code is observed, however, the code observance lacks antecedent basis, further the spatial relationship of the high and low reflectance portions and the transparent material as well as the reflection reduction layer is not positively recited. Similar rationale applies to claims 2-3 and 9.

Claim 6 recites "a surface of the article where the laminated member is attached", also lacks antecedent basis.

Claim 9 is further unclear as to if the code is on the article or the laminated member.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 6,000,804 to Kimura.

Kimura teaches a retroreflective laminate (laminated member) where a resin layer 214, FIG. 4 and associated text, comprises a transparent microsphere 216 with incident light 218 transmits through the microsphere and resin layer (thus transparent material) and patterned interference layer 222 of titania coated mica (pearl pigment instant claim 5, same material as instant [0052]) shown in detail in layer 22 of FIG. 2, titania 26 and mica 24 which reflected light 228 reflects from surfaces on 222 and reflective layer 212 (high-reflectance portions). The high and low reflectance portions are set forth at 5:55-6:50, where Kimura explains an optical path difference of reflected

lights 20a and 20b showing low-reflectance portions of traveled light and at 6:45-50, light 30 is reflected from the reflective substrate at an increase (high-reflectance portions). Kimura also explains a hologram image is laminated with the retroreflective material at 4:15-20 and 3:8-40 for recording waves used in packages and notes used as money (record code, see also 16:45-17:35 and shown as hologram layer 60 laminated with same layers as set forth in FIGs. 1 and FIG. 4). FIG. 4 shows these materials in a transparent material, having the same materials as Applicant and thus meets the properties of light travel or reflectance as recited per instant claims 1-6. Because the microspheres are round and embedded in the transparent resin material's upper surface, the surface of the resin layer is inherently indented, and spaces around it are non-indented (claim 4). Further, as to how the information code is observed or used is intended use (claims 1 and 3) and it has been held that a recitation with respect to the manner in which a claimed article is intended to be employed does not differentiate the claimed article from a prior art article satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). See also Example 1-1.

- Applicant argues the features of claims 1 and 8 essentially perform a function opposite to that in Kimura: reducing reflected light in instant claims 1 and 8 as opposed to "emphasizing" reflected light in Kimura. However, the claims are not particular to the function or performance of the articles and Applicant has not provided a convincing argument

because the same materials are present in the prior art that are recited in the instant claims and thus must function in the same manner. When the claimed and prior art products are identical or substantially identical in structure or are produced by identical or a substantially identical processes, a prima facie case of either anticipation or obviousness will be considered to have been established over functional limitations that stem from the claimed structure. *In re Best*, 195 USPQ 430, 433 (CCPA 1977), *In re Spada*, 15 USPQ2d 1655, 1658 ( Fed. Cir. 1990). The ***prima facie*** case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed products. *In re Best*, 195 USPQ 430, 433 (CCPA 1977). When the reference discloses all the limitations of a claim except a property or function, and the examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention but has basis for shifting the burden of proof to applicant as in *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980). See MPEP § § 2112- 2112.02.

6. Claims 1, 3-4, 6-7, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,612,119 to Olsen et al.

Olsen teaches a retroreflective transfer where reflective aluminum portions 4 (7:34-40, inherently having high reflective portions because the

flakes are reflective) patterned on a retroreflective glass microsphere layer 3 (10:10-15) are embedded in a transparent resin material 6 (9:50-55) having indented portions (from the microspheres) of claim 4 and non-indented portions (see flat surface of 6) having paper 1 (opaque and thus functions as reflection-reducing layer) and an extender elastomer (adhesive) layer 7 shown in the Figure for adhering to textile (an article) via transfer by heat press (see 9:55-10:10, claim 9). Further to how the information code is observed or used is directed to the intended use of the device (claims 1 and 3) and it has been held that a recitation with respect to the manner in which a claimed article is intended to be employed does not differentiate the claimed article from a prior art article satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Claims 1, 3-4, 6-7, and 9 are met.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,612,119 to Olsen et al. in view of US 6,641,874 to Kuntz et al.

Olsen essentially teaches the claimed invention.

Olsen does not explicitly recite a hologram or pearl pigment as per claims 2 and 5.

Kuntz teaches multilayer reflective films employing holograms and pearl or titania coated mica flake pigments to have light reflecting in higher and lower regions thereby forming holographic images in reflective layers used for information or patterns on paper documents, clothes or woven fabrics (see 5:1-5, 5:35-45, 7:25-30, 8:1-20).

It would have been obvious to one having ordinary skill in the art to have modified the laminated member of Olsen to include hologram and pearl pigments as claimed because Kuntz teaches the advantages of low and high reflectance regions forming holographic images used for information or patterns on paper documents, clothes or woven fabrics as cited above.

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAMRA L. DICUS whose telephone number is (571)272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tamra L. Dicus /TLD/  
Examiner  
Art Unit 1794

March 19, 2008

/Terrel Morris/  
Supervisory Patent Examiner  
Group Art Unit 1794